The Journal of Systems and Software

Volume 30, Numbers 1 & 2, July–August 1995

Double Issue on Reengineering Complex Systems

Contents

Guest Editors' Corner

Reengineering Complex Systems 1
R. D. Semmel and M. Wilson

Systems Engineering and Systems Management for Reengineering 3
Andrew P. Sage

An Architectural Basis for Evolving Software Systems 27
John R. Leary

Reengineering Computer-Based Systems for Enhanced Concurrency and Layering 45
Lonnie R. Welch, Antonio L. Samuel, Michael W. Masters, Robert D. Harrison, Mark Wilson, and Joe Caruso

Software Process Reengineering: Toward a New Generation of CASE Technology 71
Judith D. Ahrens, Noah Prywes, and Evan Lock

Methods for Validating Real-Time Constraints 85
Jane W. S. Liu and Rhan Ha

Managing Design Trade-Offs for a Program Understanding and Transformation Tool 99
William G. Griswold and Darren C. Atkinson

A Reuse Approach to Software Reengineering 117
Daniel E. Wilkening, Joseph P. Loyall, Marc J. Pitarys, and Kenneth Littlejohn

Integrating Reengineered Databases to Support Data Fusion 127
R. D. Semmel and R. P. Winkler

Software Migration and Reengineering: A Pilot Project in Reengineering 137
Stephen R. Mackey and Lynn M. Meredith

Controversy Corner

Object-Oriented Requirements to Object-Oriented Design: An Easy Transition? 151
Alan M. Davis

Readers' Corner

An Exchange with an Anonymous Reader, and a Call for Help from Either Researchers or Librarians 160
Robert L. Glass, Editor

The Role of Experiments in Computer Science 161
Peter Fletcher

Biographies 164

Volume 30, Number 3, September 1995

SPECIAL ISSUE ON SOFTWARE REUSE

Contents

Guest Editors' Corner

Software Reuse: Current Status and Trends 167
Mansour Zand and Mansur Samadzadeh

Experiences of a Software Reuse Project 171
Sadahiro Isoda

Populating Software Repositories: Incentives and Domain-Specific Software 187
Jeffrey S. Poulin

The REBOOT Approach to Software Reuse 201
Guttorm Sindre, Reidar Conradi, and Even-André Karlsson

Hybrid Domain-Specific Kits 213
Martin L. Griss and Kevin D. Wentzel

Information Access Tools for Software Reuse 231
Scott Henninger

Using English to Retrieve Software 249
M. R. Girardi and B. Ibrahim

Measurement of Language-Supported Reuse in Object-Oriented and Object-Based Software 271
James M. Bieman and Santhi Karunanithi

Modeling Reuse across the Software Life Cycle 295
William B. Frakes and Christopher J. Fox

Biographies 303

Volume Contents